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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,402	01/13/2006	Koji Ukai	0425-1242PUS1	9872

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EXAMINER	
HUANG, GIGI GEORGIANA	
ART UNIT	PAPER NUMBER
1612	

NOTIFICATION DATE	DELIVERY MODE
04/21/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/564,402	UKAI ET AL.	
	Examiner	Art Unit	
	GIGI HUANG	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/13/2006, 1/17/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Application

1. The response filed 12/28/2007 has been received, entered and carefully considered. The response affects the instant application accordingly:

   a. Claims 1-4 and 6-8 have been amended.

   b. Claim 5 has been cancelled.

   c. Claim 9 has been added.

2. Claims 1-4 and 6-9 are pending in the case.

3. Claims 1-4 and 6-9 are present for examination.

4. The text of those sections of title 35.U.S. Code not included in this action can be found in the prior Office action.

5. All grounds not addressed in the action are withdrawn.

6. New grounds of rejection are set forth in the current office action.

Information Disclosure Statement

7. The Examiner thanks the Applicant for the clarification on JP-11-501950, which has been notated as considered. The corrected information disclosure statement (IDS) submitted on January 13, 2006 is enclosed.

8. The information disclosure statement filed 1/17/2008 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because there is no translation of JP 09-216817 and JP 09-511257 in full or abstract form. It has been placed in the application file, but the information referred to therein has not been considered as to the

merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

New Grounds of Rejection

9. Due to the amendment of the claims the new grounds of rejection are applied:

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Depui et al. (WO 97/25066).

Depui et al. teaches a pharmaceutical dosage form comprising proton pump inhibitors, bases (antacid agents), alginates, thickeners, polymers (including enteric polymers), and other pharmaceutical excipients to form multilayered tablets, sachets, and multiple unit tableted dosage forms. The proton pump inhibitors may be utilized in neutral or salt forms, including racemic form or pure form. The specific proton pump inhibitors taught are omeprazole (and encompassing its optical isomer esomeprazole), lansoprazole, pantoprazole, and pariprazole (rabeprazole). The proton pump inhibitors

are in granular form, individually enterically coated with a polymer (including hydroxypropyl methylcellulose), combined with alginate/antacid agent powders or granules and other excipients. The multiple unit dosage form is also taught to be dispersed in liquid and can be given to patients with swallowing disorders. The formulated core material is in a granules size approximately between 0.1 and 4mm and preferably between 0.1 and 2mm.

Depui teaches the prepared active pellets/granules comprising omeprazole, hydroxypropyl methylcellulose and Polysorbate 80, and the tablet comprising those active granules with calcium carbonate (base), magnesium hydroxide (base), potato starch (glidant, diluent, disintegrant and binder), water, microcrystalline cellulose, crosslinked polyvidone (polyvinylpyrrolidone). Depui also teaches the antacid or alginate granules comprise mannitol, corn starch, potato starch, low-substituted hydroxypropylcellulose, microcrystalline cellulose, and crosslinked PVP. Depui also teaches the inclusion of additives for the granules including plasticizers, pigments, anti-tacking and anti-static agents such as talc and magnesium stearate. Depui teaches the inclusion of layer substances for the formulations for improved properties such as pH-buffering with components such as citric acid and talc. As the critical elements for the granules are taught, the properties of the granules such as viscosity would be inherent to the composition (Abstract, Page 2, lines 5-10, Page 3, lines 10-18, Page 4, lines 15-21, Page 5, lines 15-30, Page 6, lines 1-29, Page 7, lines 1-20, Page 8, lines 20-25, Page 9, lines 1-10, Page 10 (all), Page 11, lines 10-15, Page 12, lines 12-30, Page 13, lines 1-2, 25-30, Page 14, lines 9-25, Page 16, lines 1-24, Page 19, lines 5-20, Page 22,

lines 14-15, Example 1, Page 23 (all), Page 25-26, Example 2, Page 27-28, Example 3, Page 29, Example 4, Claim 1-8, 13-15, 17-18, 20-23).

All the critical elements are taught by the cited reference and thus the claims are anticipated.

12. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Ukai et al. (U.S. Pat. Pub. No. 2002/0039597).

Ukai et al. teaches a composition comprising benzimiadzole type compounds and its alkali salts-all are proton pump inhibitors, bases, thickeners, polymers (including enteric polymers), and other pharmaceutical excipients that are formed into tablets soluble or rapidly degradable (dispersible) in water or in gastric acid. The specific proton pump inhibitors taught are omeprazole (and encompassing its optical isomer esomeprazole), lansoprazole, pantoprazole, and rabeprazole. The proton pump inhibitors are in granular form, individually enterically coated with a polymer (including hydroxypropyl methylcellulose), combined with bases, crospovidone, granules not containing the proton inhibitors ("placebo"), and other excipients to be compressed into a tablet. The formulated core material is made, granulated, dried, and screened through a 24-mesh screen, producing particle sizes of about 841 micron or less (see STG Particle Size/Screen Mesh Comparison).

Tables 6-13 (Pages 6 -8) and Examples 28-29 provide several examples, fulfilling the claims. Ukai teaches the prepared active granules comprising sodium rabeprazole, carbonate, mannitol, and hydroxypropyl cellulose. The granule without the proton inhibitor has mannitol and hydroxypropyl cellulose (also a thickener) with

variation. Crospovidone, talc, and HA Sankyo (contains talc, fumaric acid, and hydroxypropylmethyl cellulose) are also added with other excipients to form the placebo (Abstract, Paragraph 2, 4, 7, 9-14, 17, 20-21, 25-26, 29-33, 40-43, 72-82, Claims 1-15). As the critical elements for the granules are taught, the properties of the granules such as viscosity would be inherent to the composition (Abstract, Paragraph 2, 4, 7, 9-14, 17, 20-21, 25-26, 30-3, 40-43, 72-82, Claims 1-15).

All the critical elements are taught by the cited reference and thus the claims are anticipated.

Claim Rejections - 35 USC § 103

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Depui et al. (WO 97/25066) as applied to claims 1-4 and 6-8 in view of Pharmaceutical Dosage Forms: Tablets (Vol.1, Second edition).

Depui et al. teaches a pharmaceutical dosage form comprising proton pump inhibitors, bases (antacid agents), alginates, thickeners, polymers (including enteric polymers), and other pharmaceutical excipients to form multilayered tablets, sachets, and multiple unit tableted dosage forms. The proton pump inhibitors may be utilized in neutral or salt forms, including racemic form or pure form. The specific proton pump inhibitors taught are omeprazole (and encompassing its optical isomer esomeprazole), lansoprazole, pantoprazole, and pariprazole (rabeprazole). The proton pump inhibitors are in granular form, individually enterically coated with a polymer (including hydroxypropyl methylcellulose), combined with alginate/antacid agent powders or granules and other excipients to be compressed into a tablet. The multiple unit dosage

form is also taught to be dispersed in liquid and can be given to patients with swallowing disorders. The formulated core material is in a granules size approximately between 0.1 and 4mm and preferably between 0.1 and 2mm.

Depui teaches the prepared active pellets/granules comprising omeprazole, hydroxypropyl methylcellulose and Polysorbate 80, and the tablet comprising those active granules with calcium carbonate (base), magnesium hydroxide (base), potato starch (glidant, diluent, disintegrant and binder), water, microcrystalline cellulose, crosslinked polyvidone (polyvinylpyrrolidone). Depui also teaches the antacid or alginate granules comprise mannitol, corn starch, potato starch, low-substituted hydroxypropylcellulose, microcrystalline cellulose, and crosslinked PVP. Depui also teaches the inclusion of additives for the granules including plasticizers, pigments, anti-tacking and anti-static agents such as talc and magnesium stearate. Depui teaches the inclusion of layer substances for antacid formulations for improved properties such as pH-buffering with components such as citric acid and talc (Abstract, Page 2, lines 5-10, Page 3, lines 10-18, Page 4, lines 15-21, Page 5, lines 15-30, Page 6, lines 1-29, Page 7, lines 1-20, Page 8, lines 20-25, Page 9, lines 1-10, Page 10 (all), Page 11, lines 10-15, Page 12, lines 12-30, Page 13, lines 1-2, 25-30, Page 14, lines 9-25, Page 16, lines 1-24, Page 19, lines 5-20, Page 22, lines 14-15, Example 1, Page 23 (all), Page 25-26, Example 2, Page 27-28, Example 3, Page 29, Example 4, Claim 1-8, 13-15, 17-18, 20-23).

Depui et al. does not expressly teach the incorporation of light anhydrous silicic acid (silicone dioxide).

Pharmaceutical Dosage Forms: Tablets (Vol.1, Second edition) teaches the benefits of antiadherents and glidants in formulations. Pharmaceutical Dosage Forms teaches that talc, Cab-O-Sil, and Syloid are analogous materials for both antiadherent and glidant properties. It also teaches that silica has greater efficiency as a glidant than magnesium stearate or purified talc.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to substitute light anhydrous silicic acid for talc or magnesium stearate, as suggested by Pharmaceutical Dosage Forms: Tablets (Vol.1, Second edition), and produce the instant invention. It would have been obvious to substitute one material for another depending on the desired flow property and adhesion for the product.

One of ordinary skill in the art would have been motivated to do this because it is desirable for manufacturers to have analogous choices to substitute the antiadherent and/or glidant when motivated by pricing, availability, or desired properties of the antiadherent and glidant used to produce the final product.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ukai et al. (U.S. Pat. Pub. No. 2002/0039597) as applied to claims 1-4 and 6-8 in view of Pharmaceutical Dosage Forms: Tablets (Vol.1, Second edition) and Samejima et al. (U.S. Pat. No. 5068112).

Ukai et al. teaches a composition comprising benzimiadzole type compounds and its alkali salts-all are proton pump inhibitors, bases, thickeners, polymers (including enteric polymers), and other pharmaceutical excipients that are formed into tablets soluble or rapidly degradable (dispersible) in water or in gastric acid. The specific proton pump inhibitors taught are omeprazole (and encompassing its optical isomer esomeprazole), lansoprazole, pantoprazole, and rabeprazole. The proton pump inhibitors are in granular form, individually enterically coated with a polymer (including hydroxypropyl methylcellulose), combined with bases, crospovidone, granules not containing the proton inhibitors ("placebo"), and other excipients to be compressed into a tablet. The formulated core material is made, granulated, dried, and screened through a 24-mesh screen, producing particle sizes of about 841 micron or less (see STG Particle Size/Screen Mesh Comparison).

Tables 6-13 (Pages 6 -8) and Examples 28-29 provide several examples, fulfilling the claims. Ukai teaches the prepared active granules comprising sodium rabeprazole, carbonate, mannitol, and hydroxypropyl cellulose. The granule without the proton inhibitor has mannitol and hydroxypropyl cellulose (also a thickener) with variation. Crospovidone, talc, and HA Sankyo (contains talc, fumaric acid, and

hydroxypropylmethyl cellulose) are also added with other excipients to form the placebo (Abstract, Paragraph 2, 4, 7, 9-14, 17, 20-21, 25-26, 29-33, 40-43, 72-82, Claims 1-15).

Ukai et al. do not expressly teach the incorporation of anhydrous silicic acid (silicon dioxide) or citric acid.

Pharmaceutical Dosage Forms: Tablets (Vol.1, Second edition) teaches the benefits of antiadherents and glidants in formulations. Pharmaceutical Dosage Forms teaches that talc, Cab-O-Sil, and Syloid are analogous materials for both antiadherent and glidant properties. It also teaches that silica has greater efficiency as a glidant than magnesium stearate or purified talc.

Samejima et al. teaches that known buffers for pharmaceutical preparations such as granules are organic acids such as fumaric acid, succinic acid, citric acid, and malic acid (Col. 2, lines 5-21 and 34-36).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to substitute light anhydrous silicic acid for talc or magnesium stearate, as suggested by Pharmaceutical Dosage Forms: Tablets (Vol.1, Second edition) and substitute citric acid for fumaric acid as suggested by Samejima, and produce the instant invention. It would have been obvious to substitute one material for another depending on the desired flow property, adhesion, or amount of buffering for the product.

One of ordinary skill in the art would have been motivated to do this because it is desirable for manufacturers to have analogous choices to substitute the

antiadherent/glidant or buffers when motivated by pricing, availability, or desired properties of the antiadherent, glidant, and buffer used to produce the final product.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

15. Claims 1-5, 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Depui et al. (WO 97/25066).

Claim 5 is cancelled, the rejection is moot.

Applicant's arguments filed 12/28/2008 have been fully considered but they are not persuasive. Applicant asserts that the placebo granules are an extender for the actives which as a recitation of intended use. This is not persuasive as the claim is a composition claim and as Depui teaches granules with the active and granules with an alginate/antacid (placebo- without the active proton inhibitors). The art meets the composition recitations of the claims.

Accordingly, the rejection of claims 1-4, 7-8 under 35 U.S.C. 102(b) as being anticipated by Depui et al. (WO 97/25066) is maintained.

16. Claims 1-5, 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ukai et al. (U.S. Pat. Pub. No. 2002/0039597).

Claim 5 is cancelled, the rejection is moot.

Applicant's arguments filed 12/28/2008 have been fully considered but they are not persuasive. Applicant's argument with respect to the coating of seeds with the active is not persuasive as it is a product by process claim that is are viewed as product claims by the office. The composition recitations are to a preparation comprising an active granule, a placebo granule, thickening agent, with particular drugs, polymers and particle size which has been met by the art.

Accordingly, the rejection of claims 1-4, 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ukai et al. (U.S. Pat. Pub. No. 2002/0039597) is maintained.

Conclusion

17. Claims 1-4 and 6-9 are rejected.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIGI HUANG whose telephone number is (571)272-9073. The examiner can normally be reached on Monday-Thursday 8:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fredrick Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GH

/Zohreh A Fay/
Primary Examiner, Art Unit 1612